

**METHOD AND APPARATUS FOR  
DETECTING KISSING UNBOND DEFECTS**

**ABSTRACT OF THE DISCLOSURE**

5           A active thermographic method for detecting subsurface defects in a specimen,  
particularly kissing unbond defects, includes heating a specimen, applying a force to the  
surface of the specimen to shift and separate the walls of the defect, and obtaining  
thermographic images of the specimen over time to monitor the heat flow through the  
specimen and detect thermal discontinuities. Because kissing unbond defects normally  
10   have good physical contact, and therefore good thermal conductivity, between its walls,  
these defects can go undetected in conventional active thermographic methods. By  
distorting the surface of the specimen, the kissing unbond defect is enlarged enough to  
generate sufficient thermal contrast for the defect to appear in the thermographic images.

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